REMARKS

The specification has been amended as requested thus rendering the objections to the specification moot.

Claim 1 has been rejected as being anticipated by EP 0 263 052. The Examiner states that he has construed the "unitary manifold assembly" as **the inlet and outlet manifolds** and associated piping assembled together into a single unit making the fuel distribution system depicted in Figure 2 (of EP 0 263 052). In this construction of the reference, the Examiner is referring to elements 102, 104, 106, 108, 110, and 112 shown in FIG. 2 of the reference. We note that the reference itself refers to these elements as "conduits", and that they are all shown in FIG. 2 (referred to by the Examiner) as <u>separate</u> conduits. There is absolutely no suggestion in the reference that a <u>unitary</u> manifold could be used for distributing the fuel to the several stacks in the prior art system. Note that the Examiner himself has used the phrase "inlet and outlet manifolds" in characterizing what is shown in the prior art disclosure.

We note that in order for a reference to be an <u>anticipatory</u> reference, it must clearly disclose each and every facet of the claimed subject matter. The factual determination of anticipation requires the disclosure in a single reference of every element of the claimed invention. See: <u>Ex parte Levy</u>, 17 USPQ2d 1461 (PTO Bd. of Pat. App. and Int. 1990). Furthermore, it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference. See <u>Lindermann Maschinenfabrik GmbH v. American Hoist and Derrick</u>, 221 USPQ 481 (Fed. Cir. 1984). We submit that, in the present case, there is no motivation provided by the reference to use a unitary manifold to form the several conduits shown and described in the reference, and thus the reference cannot be said to anticipate the subject matter of Claim 1 in this application. Therefore, the §102 rejection of Claim 1 is respectfully traversed.

Respectfully submitted,

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Clean copy of amended portions of the specification

The last full paragraph on page 2 of the specification:

The manifold includes a fuel passage which receives fuel exhausted from the fuel cell stacks in stage one and directs that exhausted fuel to the fuel cell stack(s) in stage two. The manifold also includes a fuel passage which receives fuel exhausted from the fuel cell stack(s) in stage two, combines with air exhaust, and exhausts that depleted fuel and air from the power plant. The manifold also includes a flow passage to uniformly distribute air from an air blower to each fuel cell stack in the power plant. The air from each fuel cell stack is also collected in the manifold, which is sent to another component and then combined with the fuel exhaust from the fuel cell stack(s) in the second stage to exit the power plant. The manifold includes mounting pins which properly align the fuel cell stacks that are mounted on the manifold. The various passages are sized so as to ensure that there will be a low pressure drop in reactant gases flowing from the first stage to the second stage so that the power plant can operate at substantially ambient pressure. As noted above, the fuel stream reactant is fed to the tandem stages of fuel cell stacks via the manifold, while the air reactant is fed to the fuel cell stacks in parallel via the manifold.

The paragraph bridging pages 5 and 6.

The manifold 20, which we refer to as a "fluid circuit board", is designed by laying out the respective positions of the flow channels 28, 40, 46 and 48 to correspond to each fuel cell stack connection; being based on the size and location of each of the stacks in the power plant and the allocated assembly volume. The flow channel designs of the manifold 20 are preliminary sized based on a maximum acceptable fluid flow velocity. Once the layout of the fluid flow channels and the initial or preliminary fluid flow channel areas are determined, the resultant geometry can be inputted into a computational fluid dynamics software program. The fluid circuit board geometry is thus analyzed and modified so as to provide approximately equal distribution to each fuel cell stack assembly, and to minimize pressure drop through the fluid flow channels. Fluid distribution and fluid pressure drop values are allocated to the fluid circuit board based on system requirements and system operation. Structural requirements for the manifold 20 must also be met. A finite element software program is used to analyze the manifold geometry, and the necessary geometry changes are made to meet the resultant requirements. By using the aforesaid analytical tools, the specific design of the fluid flow channels in the manifold 20 can be determined, the goal being to provide approximately equal fluid distribution and minimal pressure drop in each of the manifold channels 28, 40, 46 and 48, as well as meet the structural and volume requirements.